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***Stenophylax vibex* (CURTIS, 1834) (Trichoptera: Limnephilidae),  
a new species for the Polish fauna**

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**ABSTRACT.** During research in the Świętokrzyski National Park a new species for Polish fauna was reported, namely *Stenophylax vibex* (Trichoptera: Limnephilidae). Probably the species is expanding its territory.

**KEY WORDS:** *Stenophylax vibex*, caddis-fly, new record for Poland.

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INTRODUCTION

The genus *Stenophylax* KOLENATI 1848 is comprises of 49 species (MORSE 2009). Most of them, except four, occur in the West Palearctic region. So far only one species has been reported from Poland: *Stenophylax permistus* MCLACHLAN, 1895 (SZCZĘSNY 1990). *Stenophylax vibex* (CURTIS 1834) occurs in all western and southern European countries and in Ukraine (BOTOSANEANU & MALICKY 1978, CZACHOROWSKI & GODUNKO 2006). The larvae of the species occur near river sources or small streams (BOTOSANEANU & MALICKY 1978).

In 2004 the first larva of the species was caught in the river Gulczanka in the village Krucz, Wielkopolska (CZACHOROWSKI & ADAMEK 2006). Owing to insufficient knowledge of the morphology of the *Stenophylax* genus larvae and similarity to the genus *Micropterna*, the authors did not deem it certain and sufficiently corroborated to draw conclusions on the occurrence of the *Stenophylax vibex* in Poland on the basis of a single larva.

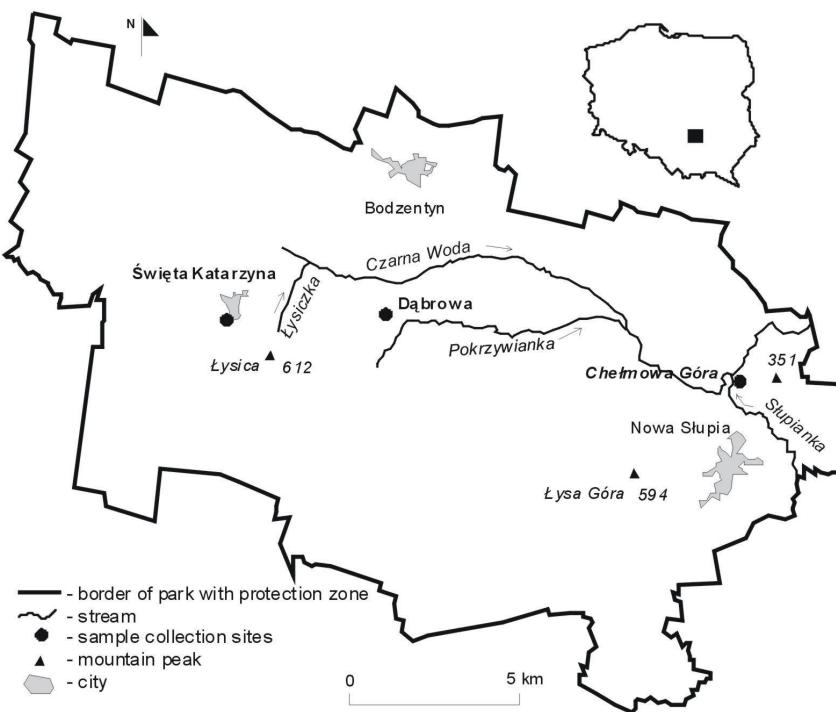
#### MATERIAL AND METHOD

The imagines were caught from April to October 2008 in the Świętokrzyski National Park with light traps. The study along with lepidopterological studies was conducted on three sites: Chełmowa Góra, Dąbrowa and Święta Katarzyna (Fig. 1).

The first catching site at Chełmowa Góra (UMT:EB03) is located in a protected area in the south-eastern part of Park in the Pokrzywiańskie Range. In the immediate vicinity of a forester's house, where a self-catching trap was hung, there are two rivers: the Słupianka and the Pokrzywianka.

The site in the Protected District of Dąbrowa (UMT:DB94) was located on the border of forest and meadow in the western part of the Dębniańska Valley and Czarna Woda. The area is located to the north of the Łysa Góra range.

The last site was in the village of Święta Katarzyna (UMT:DB94). Both the village and the protected area of the same name are located at the foot of the highest peak in the Świętokrzyskie Mountains: Łysica (612 m a.s.l.) in the west of the Łysa Góra range.



**Fig. 1.** Location of sample collection sites in the Świętokrzyski National Park.

## RESULTS AND DISCUSSION

In all the three sites: Chełmowa Góra, Dąbrowa and Święta Katarzyna, located in the Świętokrzyski National Park (Fig. 1), 162 males and 14 females of the species were caught. On the above sites *S. vibex* was found in the following catches:

- Chełmowa Góra – 02.10.08-♂1, 06.10.08-♂2, 07.10.08-♂1, 10.10.08-♂1
- Dąbrowa – 22.05.08-♀1, 06.07.08-♂1, 06.08.08-♂1, 03.09.08-♂1, 26.09.08-♂1, 02.10.08-♂15 ♀1, 06.10.08-♂29 ♀3, 09.10.08-♂2 ♀1, 11.10.08-♂18 ♀2, 12.10.08-♂25 ♀1, 14.10.08-♂39 ♀1
- Święta Katarzyna – 01.06.08-♀1, 09.06.08-♀1, 11.09.08-♂1, 15.09.08-♂1, 22.09.08-♂2, 08.10.08-♂4 ♀2, 09.10.08-♂9, 10.10.08-♂11

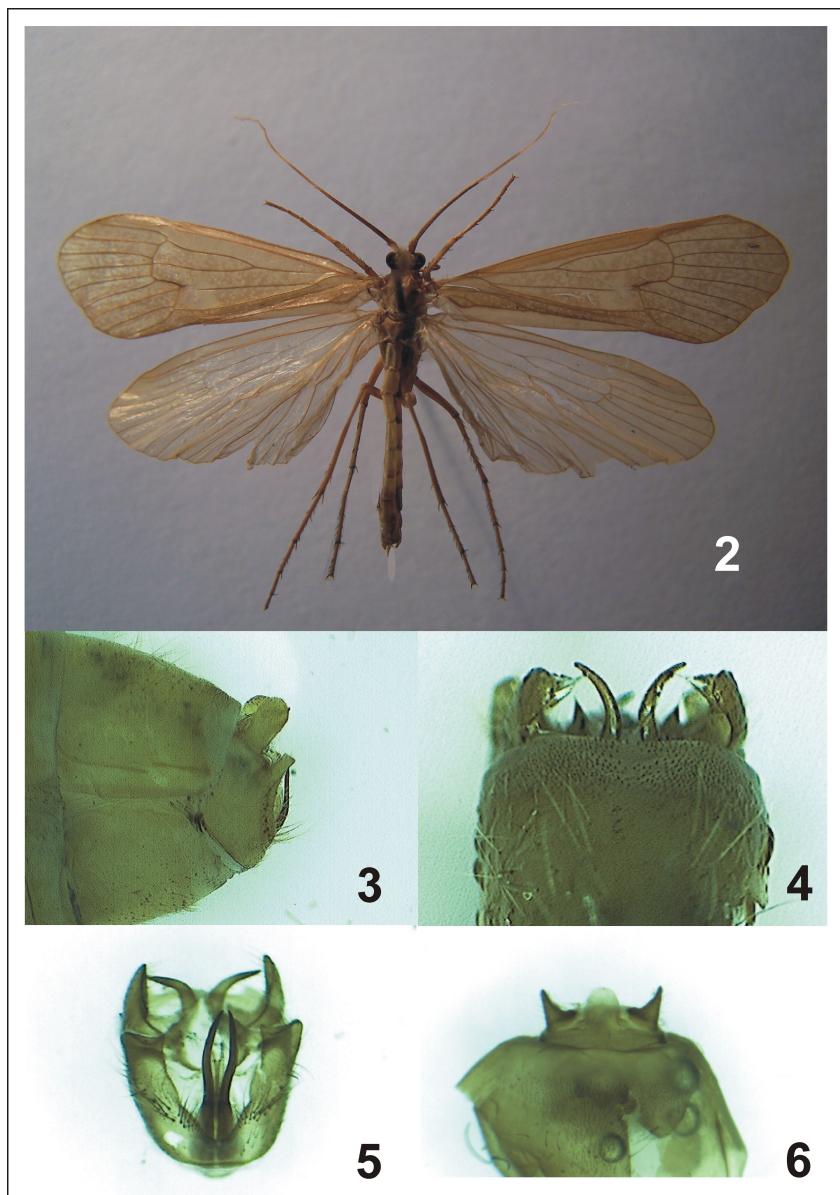
The highest number of individuals of *S. vibex* was caught at the end of September and in October. Single specimens were also caught in May, June, July and August.

The recognition of *S. vibex*, both males and females, does not pose significant difficulties (Fig. 2-6). The features pointed out by MALICKY (1983) as characteristic for the species are sufficient and do not raise doubts.

So far, 48 species of Trichoptera have been reported (RIEDEL & MAJECKI 1989, SZCZĘSNY 1990), however, *S. vibex* has not been reported in the Świętokrzyski National Park. The occurrence of numerous imagines on three sites of catch indicates non-casual and comparatively common occurrence of the species.

No intensive research of Trichoptera in Wielkopolska has been conducted as yet and the catching of a *Stenophylax vibex* larva in 2006 (CZACHOROWSKI & ADAMEK 2006) does not allow to ascertain whether the species had occurred there earlier or appeared comparatively recently, migrating from western Europe. In the case of the Świętokrzyskie Mts., in spite of intensive research, the species has not been found. The study by SZCZĘSNY (1990) was based on abundant material of the larvae caught in the years 1986-88. Theoretically, although it is not very probable, *Stenophylax vibex* larvae could have gone undetected and described as *Micropterna lateralis* or included in the common taxon grouping of young larvae of the Stenophylacini tribe. Also the study of imagines in the Świętokrzyskie Mts. was conducted, but the species was not found (RIEDEL & MAJECKI 1989). The study by RIEDEL and MAJECKI is based on collections of spotted imagines with entomological net near water reservoirs. However, the authors included in the analysis material collected in the years 1960-1961 with light traps. The material was also collected in localities where *Stenophylax vibex* occurs now (or nearby). Additionally, in recent decades in many localities in Poland Trichoptera have been caught with light traps, but *Stenophylax vibex* has not been reported so far.

Taking the above arguments into consideration it may be stated that most probably *Stenophylax vibex* has appeared in Poland comparatively recently (the beginning of the 21st cent.) or before it has occurred in very low numbers and locally, while now it is expanding its territory, maybe due to changes in water habitats. If ecological requirements of the species' larvae are similar to those of the *Stenophylax permistus* larvae, than the larvae of *S. vibex* should prefer small water courses, seasonally drying up or with low level in summer.



**Figs 2-6.** *Stenophylax vibex* (CURTIS, 1834) 2 – habitus, 3 – male copulatory apparatus (lateral), 4 – male copulatory apparatus (dorsal), 5 – male copulatory apparatus (caudal), 6 – female copulatory apparatus (dorsal).

The hypothesis of a possible current colonizing of small water courses in Poland by *Stenophylax vibex* must still be corroborated by studies of imagines and review of older larvae collections.

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